



**PERFORMANCE WORK STATEMENT**  
**EPA Contract Number: EP-C-08-010**  
**Contractor: Scientific Consulting Group, Inc. (SCG)**  
**EPA Work Assignment Number: B-04**

**TITLE:** Program Support for the U.S. EPA Environmental Technology Verification (ETV) Program

**PERIOD OF PERFORMANCE:** Date of Issuance through June 30, 2009

**ESTIMATED LEVEL OF EFFORT:** 1,700 Hours

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**BACKGROUND**

The U.S. Environmental Protection Agency's (EPA's) Environmental Technology Verification (ETV) Program develops test protocols and verifies the performance of innovative technologies that have the potential to improve protection of human health and the environment. The goal of ETV is to provide credible performance data for commercial-ready environmental technologies to speed their implementation for the benefit of purchasers, permittees, vendors, financiers, and the public. ETV, through its verification organizations, evaluates the performance of commercial-ready environmental technologies by providing objective, government quality-assured testing data and reports. Since its inception, ETV has developed over 90 testing protocols and verified more than

400 technologies. Tracking and reporting of program activities, products and accomplishments; outreach and dissemination of verification information to end-use audiences; and documentation, assessment and communication of program performance and human health and environmental impacts are all critical to the on-going function and success of the program.

## **PURPOSE**

The purpose of this statement of work (SOW) is to define the steps that will be needed to provide program support to the ETV Program with a period of performance to November 30, 2009. Support will be necessary to:

- Conduct outreach and dissemination of ETV information through exhibition at technical conferences and expositions
- Update and maintain an Internet-based database for collecting and synthesizing ETV tracking and reporting data
- Document actual and projected outcomes and develop a technical report to highlight select case studies of ETV impacts.

## **TASK DESCRIPTIONS**

The contractor shall furnish all personnel, material, equipment, and services necessary to perform the work outlined in the following tasks.

### **TASK 1: Prepare Work Plan**

The contractor shall prepare a work plan and cost estimate in accordance with the terms and conditions of the contract. The contractor's work plan should contain a break-out clearly specifying estimates (LOE, ODCs, etc.) associated with performing each of the individual Tasks 1 through 6 as outlined in this SOW.

### **TASK 2: Conference Calls**

The contractor shall participate in a conference call with the EPA work assignment manager (WAM) within one week of work assignment initiation. The contractor shall also participate in periodic calls (approximately biweekly) with the EPA WAM to discuss progress and relevant technical issues related to the work assignment tasks.

### **TASK 3: ETV Exhibit Support**

The contractor shall contract and secure rental exhibit space for up to five (5) exhibitions and conferences that will occur through November 30, 2009. The contractor shall maintain a current schedule of exhibiting commitments for ETV and provide this schedule to the EPA WAM on an as-needed basis.

The contractor shall provide on-site support (clearly identifying themselves as a U.S. government contractor) at up to three (3) of the above confirmed expositions/conferences as determined by the EPA WAM. Support may include exhibit set-up, staffing, Web site demonstrations, handout distribution, exhibit breakdown, and collection of questions, requests for information, and listserv sign-ups which are forwarded at exhibition end to the EPA WAM. Any events not staffed by the contractor will be staffed by the EPA WAM or an ETV program or center/project representative. When the exhibit is scheduled to be staffed by someone other than the contractor, detailed instructions and completed shipping materials are to be included with the exhibit. The contractor shall help coordinate with the designated staffer to ensure that they are familiar with the exhibits, exhibiting times, how to set-up the exhibit, etc.

The EPA WAM will provide technical direction detailing which exhibit/conference, location, dates, and contractor responsibilities will be performed for each exposition or conference at which ETV is to exhibit.

The contractor shall ensure, either by consulting the EPA WAM or by utilizing the ETV Web site, that all outreach materials accompanying exhibits are in color, up-to-date, and are safely packed and shipped/arrive in good condition. Color copies of current program outreach documents will be provided by the EPA WAM and should be included as expendables with the ETV exhibits. At the onset of the work assignment, the EPA WAM will provide the contractor with a documents inventory, catalog, and checklist specifying exhibit materials and handouts that should be used at exhibiting opportunities. The contractor shall track the types (document number, date) and number of program outreach documents that they have available and request new/additional copies as necessary from the EPA WAM. The inventory will be updated regularly and provided to the contractor. The contractor shall ensure that all staff of the exhibit are familiar with the ETV Program and exhibit documents.

In addition to expendables, the contractor shall ensure that the ETV exhibits and any supplementary exhibit accessories (table-throw, literature stand, etc.) are kept in good working condition. The contractor shall take all precaution to ensure that the exhibit and materials are shipped and packed/unpacked properly to avoid damage to the exhibit/accessories.

The contractor shall ensure, as necessary and when approved by the EPA WAM (through technical direction), that Internet access and a laptop are available in order to display the ETV Web Site and conduct Web site demonstrations while staffing the ETV exhibit. Support for exhibiting, such as ordering/securing of exhibit space, furniture, electrical, and computer lines and shipping of exhibit materials and expendables via Federal Express will be conducted as necessary. The contractor shall arrange for shipping of the exhibit and expendables to and from the conferences or to and from the EPA WAM as necessary. Upon initiation of the work assignment, exhibit equipment and expendables will be cataloged and specified via technical direction, and transferred to the contractor through appropriate documented contract property transfer procedures.

#### **TASK 4:       Development and Maintenance of Internet-Based ETV Database**

The ETV Program currently operates an Internet-based database (developed under a previous contract) for input, collection, and reporting of information on program activities, milestones, products, funding, operations, and other activities. Under this task, the contractor shall update, refine, and/or further develop the database input modules and report generating functions to reflect current program operations and the most current, user-friendly database software applications, as available. The contractor shall also be responsible for on-going maintenance and trouble-shooting for the existing database modules and reporting functions, including housing of the database on the contractor's server and ensuring that the database, modules, and all reporting functions are accessible at all times by the EPA WAM.

##### **SUBTASK 4.1:       Database Module Development and Updates**

The contractor shall design new additional data input modules for the ETV Database as identified and prioritized by the EPA WAM. The EPA WAM will provide guidance on data input needs and critical fields, which the contractor shall use in designing the new modules. In addition to existing data input modules, new modules may include:

- Collaborations/partnerships
- Technology/Outcomes Profiles and Briefs
- Others

Once a design template has been developed and input received from the EPA WAM, the contractor shall develop the new database modules and make the updated versions accessible to the EPA WAM for review, testing, and comments. During module design and development, the contractor shall identify and link, respectively, key data fields in the modules so that the modules achieve/maintain functionality and consistency within the overall ETV Database. The contractor shall incorporate comments and suggested changes from the EPA WAM and other reviewers for these modules. The contractor shall upload final EPA-approved modules to the Intranet-based database and provide support (i.e., troubleshooting, answering questions, etc.) to facilitate on-going use and data input to all modules by database users.

Completion of additional data input modules will be on-going through a period of performance to November 30, 2009.

The contractor shall edit/update existing database modules to reflect changes in program structure or activities (e.g., addition of new centers, projects, etc.; archival of non-active centers/projects; addition of new data input fields; etc.). The EPA WAM will provide input on changes to the database format or data input needs, which the contractor shall use to design and incorporate the changes. The contractor shall make the draft versions of the modified modules accessible to the EPA WAM for review, testing, and comments; incorporate comments/changes from the EPA WAM and other reviewers; and put the changes into production in the database following EPA WAM approval.

Completion of edits or updates to existing database modules will be on-going through a period of performance to November 30, 2009.

#### **SUBTASK 4.2: Reporting Functions Development and Updates**

The contractor shall generate new or edit/update existing data reporting and search functions for the modules and the database as a whole, as identified and prioritized by the EPA WAM. The contractor shall make reporting/search functions accessible to the EPA WAM and other reviewers for review, testing, and comments. The contractor shall incorporate comments and suggested changes from the EPA WAM and other reviewers for these modules. Generation of new or updated data reporting and search functions will be on-going through a period of performance to November 30, 2009.

#### **SUBTASK 4.3: Conversion of ETV Database to Most Current Software Applications**

Since the initial development of the ETV Database, EPA recognizes that more advanced, user-friendly software versions or applications may be available for development of new database modules or refinements to existing modules. The contractor shall make recommendations for employment of or conversion to new software versions/applications, as necessary and appropriate. If approved by the EPA WAM based on these recommendations, the contractor shall implement conversions to new software versions/applications. Conversion of appropriate database modules and reporting functions to new software versions/applications will be on-going through a period of performance to November 30, 2009.

#### **SUBTASK 4.4: Database Maintenance and Support**

The contractor shall make necessary changes, updates, etc. in response to comments forwarded by the EPA WAM. The contractor shall address comments or revisions identified by the EPA WAM (and other reviewers) as a result of the use of the database, modules, and reporting functions.

The contractor shall ensure that the database, modules, and all reporting functions be developed and located on a server to be accessible at all times by the EPA WAM. Administration and maintenance of the database must be transferable to the EPA WAM, if necessary. The contractor shall ensure that the Internet database remains secure and protected from corruption or data access by non-EPA WAM-approved users.

The contractor shall provide on-going maintenance and support of the ETV Database and subsequent modules. This includes ensuring that the database and modules (which are housed on the contractor's server) are functional and accessible. The contractor shall hold regular conference calls with the EPA WAM to discuss any problems that arise. The contractor shall respond to comments/problems identified by the EPA WAM and database users (i.e., provided through the database Support module function) and make necessary changes to correct for problems. The contractor shall perform routine

maintenance and trouble-shooting functions for the database, modules, and reporting functions. On an as needed basis, the contractor shall establish additional user access levels and/or supply user IDs and passwords to individual users based on access levels determined by the EPA WAM.

Maintenance and support of the ETV Database will be on-going through a period of performance to November 30, 2009.

The contractor shall provide support to revise and finalize the ETV Database Draft User Instructions Manual (originally developed in January 2005 and currently posted in a downloadable format in the database) based on comments generated by the EPA WAM and other database users, on an as needed basis. The final version of the manual will be produced in Microsoft Word and \*.pdf formats and posted in the database.

#### **TASK 5: ETV Outcomes Literature Search and Documentation, Data Entry**

Historically, the ETV Program has measured performance with respect to program products, or outputs developed. In more recent years, however, ETV has expanded its approach in assessing program performance to include tracking and documentation of program outcomes, or impacts. Under this task, the contractor shall collect and document data on outcomes of verification, including pollution reductions attributable to the use of ETV technologies and subsequent health or environmental impacts, and other types of outcomes as outlined below.

The contractor shall perform a comprehensive literature search to locate publicly available information, resources (e.g., regulatory impacts analyses, cost/benefit data, databases, etc.), and “tools” (e.g., models) that could be used to document and/or measure program impacts or outcomes. In particular, the contractor shall perform systematic Google/Internet searches, etc., to collect data for documentation of program outcomes using keywords and combinations of keywords selected to yield useful outcomes. Documentation of program outcomes or impacts attributed to the use of ETV-verified technologies or verification should be based on available data, reasonable assumptions, and logical extrapolations using data obtained from well-accepted sources, as appropriate. Outcomes citations, incidents, and/or documentation should be collected for any technology categories or areas that the ETV Program has prioritized or addressed, or for program-wide impacts that may not be specific to individual technology categories/areas. The following is a list of some of the types of outcomes that should be searched for and data collected to document ETV Program impacts [Note: this list should not be considered comprehensive. Additional outcomes or types of outcomes should also be identified and documented]:

- Pollutant or emission reductions
- Environmental and human health
- Resource conservation
- Financial and economic
- Regulatory citations or compliance

- Technology acceptance and use
- Scientific advancement

The contractor shall collect outcomes data and perform data entry of this information to the existing Outcomes module in the Internet-based ETV Database. The contractor shall provide updates to the EPA WAM periodically on the progress of the Google/Internet search and subsequent population of the ETV Database. **Appendix A** of this SOW shows the format for outcomes data input into the ETV Database, including the documentation required and the types of data to be collected and entered. In addition to data input to the database, the contractor shall maintain any hard copy or electronic records to support outcomes documentation; these records will be provided to the EPA WAM at conclusion of the work assignment. The contractor shall perform 100 hours of data collection and entry into the database. This work should be on-going for a period of performance through September 30, 2009.

#### **TASK 6: Development of Technical ETV Outcomes Case Study Report**

Under this task, the contractor shall develop a technical report highlighting select case studies for specific technology areas or categories. This information will be designed to communicate potential or actual impacts or benefits that can be attributed to the use of ETV-verified technologies or verification information based on available data, reasonable assumptions, and logical extrapolations using data obtained from well-accepted sources, as appropriate. This information is not intended to serve as a basis for making regulatory decisions or for choosing to purchase or sell a technology. The following subtasks outline work necessary to develop this case study report.

##### **SUBTASK 6.1: Background Review/Literature Search**

The contractor shall review all background information provided by the EPA WAM (e.g., copies of past case studies, URLs for appropriate verification statements/reports, etc.), including a list of potential case study topics/categories. The contractor shall perform literature searches, as needed, to locate publicly available information, resources (e.g., regulatory impacts analyses, cost/benefit data, databases, etc.), and “tools” (e.g., models) that could be used to document and/or measure program impacts and develop the case studies.

##### **SUBTASK 6.2: Case Study Report Outline**

The contractor shall develop and submit a Microsoft Word file to the EPA WAM for review containing a draft outline of the case study report to be developed under **Subtask 6.3** (below). This outline shall describe, in general, how the case studies will be organized (section titles, etc.) and list what types of information the case studies will contain. The outline shall include a brief description of the different outcomes/impacts (economic, pollution reduction, etc.) the contractor expects to be able to assess/report for each case study, as well as any particularly notable approaches, resources, or analytical models that the contractor plans to use to develop the different case studies.



EPA has published two existing case study documents, *Environmental Technology Verification (ETV) Program Case Studies: Demonstrating Program Outcomes, Volume I* (EPA/600/R-06/001) and *Volume II* (EPA/600/R-06/082), which are available on-line at <http://www.epa.gov/etv/outcomes.html>. The contractor shall use these reports as the template for formatting the outline and case study report under **Subtasks 6.2** and **6.3**, respectively, of this SOW. In the outline, the contractor shall include any proposed changes to the previously used template, as appropriate, for EPA consideration and approval. Note: the existing case study documents published by EPA include introductory material: purpose statements, summaries, caveats and explanation of document organization and scope. In the outline, the contractor shall propose similar and updated (as necessary) information as introductory material to be included in the case study report developed under **Subtask 6.3** (below).

The EPA WAM will provide an initial list of up to five (5) pre-identified topics, or technology categories/areas that should be considered for developing the outline and the subsequent case studies for the report. Note: if the background review/literature search performed by the contractor under **Subtask 6.1** identifies significant outcomes documentation for other topics or technology categories not included in the original list of potential case study categories provided by the EPA WAM, the contractor may include these topics as recommendations for consideration by EPA in the outline.

The contractor shall revise the outline based on input provided by the EPA WAM. EPA anticipates that up to two review cycles may be needed to finalize the outline.

### **SUBTASK 6.3: Case Study Report Generation**

The contractor shall develop three (3) 10- to 15+- page-long case studies to be included in a case study report. The contractor shall develop the case studies based on information obtained from a variety of publicly available resources (see **Task 5** and **Subtask 6.1**) and by contacting center personnel and others (e.g., to obtain cost or sales data that can be used to assess ETV's impact on sales and implementation of the ETV verified technologies).

When possible, the case studies developed by the contractor shall address technology categories, rather than just single technologies. The contractor shall refer to previously published case study reports as examples for developing the studies (see **Subtask 6.2** above for reference to the template used in previously published ETV case studies). The three case studies shall be organized and formatted in a similar manner to one another and contain similar types of information, including (potentially) the following:

- A brief description of the technology(ies), what makes it/them innovative, and a summary of the current state-of-the-practice (including technology performance)

- Environmental, health, and regulatory background for the pollutants/issues addressed by the technology(ies); government initiatives may also be addressed
- A brief description of the verified technologies, appropriate test-specific information, and a summary of the test results
- Potential pollution reductions based on different market penetration scenarios and, if available, cost effectiveness of technology to the user (payback time)
- If applicable/available, health or environmental impacts or risk reductions as a result of these pollutant reductions [Note: not all of the technologies evaluated by ETV reduce pollution. In addition to monitoring technologies, ETV also evaluates technologies associated with the reduced consumption and/or use of a natural resource or more toxic compound, etc. Thus, the case studies developed for these types of technologies should include outcomes that are relevant to the nature of the technology and its role in improving environmental and human health issues.]
- Information regarding different market related issues, including evidence of market penetration; if available, vendor marketing and sales data should be included that describes how ETV information (test results, protocols, etc.) is or has been used to market or sell technologies (e.g., whether it is used in vendor marketing data, whether vendors report an impact on sales)
- Examples, if appropriate, describing how permittees and purchasers use ETV results to support technology purchasing or permitting decisions (e.g., whether the info helped during a purchase decision or to permit a technology)
- Photographs of the different technologies, if available.

If appropriate, the cases studies shall also:

- Include an assessment of different economic impacts/benefits that verification has provided, including reductions in permitting costs, costs associated with selling the technology (pilot tests, etc.), economic benefits associated with a reduced incidence of illness or disease, etc.
- Describe other successful aspects of the program, including beneficial collaborations with other organizations and how ETV information and products are being used to help market technologies, permit technologies, and to reduce/standardize technology testing requirements.

Although the contractor shall base some of the impacts described in the case studies on actual data obtained from various sources (test results, sales information, permitting savings, etc.), the contractor shall be prepared to assess other impacts (pollutant reductions, economic benefits, etc.) by making certain, reasonable assumptions on use, improvement, etc., and then extrapolating out in a logical manner, potentially by referencing information located in well-accepted sources (e.g., resources that quantify risk, health, or environmental benefits associated with the reduction in specific pollutant). The contractor shall obtain input, as needed, from contractor staff with expertise in risk assessment, health impact assessment, etc., to ensure that the approach and resources used to quantify potential risk, health, or environmental benefits in this fashion are

reasonable. The contractor shall document data sources, assumptions, and the use of any significant tools or resources, as outlined in **Subtask 6.4** (below).

The contractor shall submit each draft case study to the EPA WAM for review, along with a description of the process and assumptions used to develop different outcomes cited in the case studies, including calculations performed by the contractor, as appropriate. The assumptions, calculations, etc., used to develop quantitative outcomes will be described in the text of the case studies or included in Appendices accompanying the case studies. The contractor shall revise the individual case studies based on review comments submitted by the EPA WAM (from the EPA WAM and other reviewers).

Note: the contractor shall also submit the draft case studies to relevant ETV vendors for review/comment. The contractor shall be responsible for distributing the draft case studies to the appropriate vendors and collecting and incorporating review comments, as necessary. The contractor shall consult with the EPA WAM regarding substantive comments received from vendors.

Once all review comments have been addressed for the draft case studies, the contractor shall develop and submit a Microsoft Word file (or appropriate alternative) containing the full draft case study report to the EPA WAM. The full report shall be developed based on the outline generated and approved under **Subtask 6.2**, including the three case studies, introductory materials, and references. It will also include appropriate graphics and photographs.

The contractor shall revise the first draft full case study report based on review comments submitted by the EPA WAM (from the EPA WAM and other reviewers). Once initial comments from the EPA WAM and other reviewers have been incorporated, the contractor shall submit a second draft of the full case study report to the EPA WAM for review and arrange for two external (non-EPA) peer reviewers to review the report per EPA publication guidelines and clearance procedures. The EPA WAM will provide recommendations for potential peer-reviewers.

The final camera-ready copy of the report shall include a visually appealing cover and a limited number of graphics developed by the contractor. The contractor shall format the report per EPA publication guidelines. The contractor shall submit electronic and three paper copies (the original and two copies) of the final case study booklet to the EPA WAM. Electronic copies of the report and any graphics generated by the contractor shall be submitted in the original source file formats (preferably PageMaker or In Design) and as publication-ready \*.pdf files. The electronic copy of the report shall be forwarded on compact disks. The contractor shall have the final case study report reviewed by an editor prior to submittal.

The contractor shall develop an electronic copy of the case study report that is suitable for posting on the EPA ETV Web Site ([www.epa.gov/etv](http://www.epa.gov/etv)). This electronic file shall comply with Section 508 of the Rehabilitation Act, as well as any other standards or

guidance set or required by the National Risk Management Research Laboratory publication guidelines.

EPA anticipates that up to two review cycles may be needed to finalize the individual case studies and the full case study report, respectively.

#### **SUBTASK 6.4: References**

The contractor shall document data sources, assumptions, and the use of any significant tools or resources, as noted in **Subtask 6.3**. The contractor shall also compile a complete set of references to document the origin of specific information contained within the case studies. The contractor shall track down hard-copy or electronic versions of required reference or information sources as needed. Since the contractor should not directly contact center personnel without first getting approval to do so from the EPA project officers for the centers, the contractor shall coordinate these activities with the EPA WAM.

#### **SUBTASK 6.5: Development of ETV Outcomes Technology Briefs**

For each of the three case studies contained in the final case study report in **Subtask 6.3**, the contractor shall develop summary 2-page ETV Technology Briefs. **Attachment B** to this SOW provides an example ETV Technology Brief. The contractor shall develop the Technology Briefs using the same format as the attached example brief. The EPA WAM will provide an electronic template (in Microsoft Publisher or an appropriate alternative format) for use by the contractor in developing the briefs. At a minimum, the Technology Briefs should contain a brief synopsis of each of the following types of information:

- Background
- Test description and results (possibly in tabular format for categories with multiple verified products)
- Technology category/area and significance at a glance
- Select ETV-verified performance data (in text or tabular format)
- Select outcomes of verified technologies or use of verification data (summarized from the full case studies in the report in Subtask 6.3)
- References and related ETV links
- Appropriate photos and graphics
- ETV contact information.

The contractor shall submit each draft Technology Brief to the EPA WAM for review, and revise the Technology Brief based on review comments submitted by the EPA WAM (from the EPA WAM and other reviewers). The contractor shall submit the final Technology Briefs in the original source file formats (Microsoft publisher or appropriate alternative format) and as \*.pdf files. The contractor shall develop electronic copies of the final Technology Briefs that are suitable for posting on the EPA ETV Web Site ([www.epa.gov/etv](http://www.epa.gov/etv)). This electronic file shall comply with Section 508 of the

Rehabilitation Act, as well as any other standards or guidance set or required by the National Risk Management Research Laboratory publication guidelines.

## DELIVERABLES AND PROJECT SCHEDULE

All deliverables shall be submitted to the EPA WAM according to the following schedule.

<b>TASK 1: Prepare Work Plan</b>	
Work plan due	In accordance with the contract clauses
<b>TASK 2: Conference Calls</b>	
Kick-off conference call	1 week from work plan initiation
Periodic conference calls	On-going
<b>TASK 3: Exhibit Support</b>	
Arrangement/payment of exhibit contracts and opportunities	On-going
<b>TASK 4: Development and Maintenance of Internet Database for Tracking and Reporting Data</b>	
<b>Subtask 4.1:</b> Database Module Development and Updates	On-going
<b>Subtask 4.2:</b> Reporting Functions Development and Updates	On-going
<b>Subtask 4.3:</b> Conversion of ETV Database to Most Current Software Applications	On-going
<b>Subtask 4.4:</b> Database Maintenance and Support	On-going
<b>TASK 5: ETV Outcomes Literature Search and Documentation, Data Entry</b>	
Literature search and data collection of outcomes documentation	Initiate within 1 week after kick-off conference call, on-going through September 30, 2009 (for total of 100 hours effort for data collection and entry)
Data entry to database of outcomes documentation	Initiate within 1 week after kick-off conference call, on-going through September 30, 2009 (for total of 100 hours effort for data collection and entry)
<b>TASK 6: Development of Technical ETV Outcomes Case Study Report</b>	
<b>Subtask 6.1: Background Review/Literature Search</b>	
Background review	1 week from work plan initiation
Information search	On-going
<b>Subtask 6.2: Case Study Report Outline</b>	
Contractor submits 1 <sup>st</sup> draft outline for case study report	2 weeks after kick-off conference call
Contractor submits 2 <sup>nd</sup> draft outline for case study report	2 weeks after receipt of comments from EPA WAM
Contractor submits final outline for case study report	1 week after receipt of comments from EPA WAM
<b>Subtask 6.3: Case Study Report Generation</b>	
Contractor submits 1 <sup>st</sup> draft of <u>first</u> case study	2 weeks after the outline (Subtask 6.2) is finalized

Contractor submits 2 <sup>nd</sup> draft of <u>first</u> case study	2 weeks after receipt of comments from EPA WAM on 1 <sup>st</sup> draft
Contractor submits 1 <sup>st</sup> draft of <u>second and third</u> case studies	2 weeks after submission of 2 <sup>nd</sup> draft of first case study
Contractor submits 2 <sup>nd</sup> draft of <u>second and third</u> case studies	2 weeks after receipt of comments from EPA WAM on 1 <sup>st</sup> drafts
Contractor submits 2 <sup>nd</sup> drafts of all three case studies to ETV vendors for review/comments	2 weeks after receipt of comments from EPA WAM on 1 <sup>st</sup> drafts
Contractor submits 1 <sup>st</sup> draft of full case study report	1 week after receipt of comments from EPA WAM on 2 <sup>nd</sup> drafts of each case study
Contractor submits 2 <sup>nd</sup> draft of full case study report	2 weeks after receipt of comments from EPA WAM on 1 <sup>st</sup> draft
Contractor submits 2 <sup>nd</sup> draft of full case study report to external peer-reviewers	2 weeks after receipt of comments from EPA WAM on 1 <sup>st</sup> draft
Contract submits final draft of full case study report	1 week after receipt of comments from EPA WAM and peer-reviewers
Contractor submits camera-ready (publication-ready) copy of case study report	4 weeks after report is finalized
Contractor submits 508 compliant copy of case study report	4 weeks after report is finalized
<b>Subtask 6.4: References</b>	
Contractor submits final list of all references, citations, etc.	At the same time the camera-ready copy of the case study report is submitted to EPA
<b>Subtask 6.5: Development of ETV Outcomes Technology Briefs</b>	
Contractor submits draft Technology Briefs	3 weeks after case study report (Subtask 6.3) is finalized
Contractor submits final drafts of Technology Briefs	2 weeks after receipt of comments from EPA WAM
Contractor submits final publication-ready and 508 compliant electronic copies of Technology Briefs	1 week after Briefs are finalized

## DELIVERABLE ACCEPTANCE CRITERIA

The following deliverable acceptance criteria will be used to assess deliverables submitted under Tasks 1 through 6 of this SOW.

**TASK 1:** The contractor' work plan and cost estimate should be in accordance with the terms and conditions of the contract, and should contain a break-out clearly specifying estimates (LOE, ODCs, etc.) associated with performing each of the individual Tasks 1 through 6 as outlined in this SOW.

**TASK 4:** Updated, refined, and/or newly developed database input modules and report generating functions shall reflect current program operations and the most current, user-friendly database software applications, as available. On-going maintenance and troubleshooting for the existing database modules and reporting functions should be responsive, timely and complete. New or updated modules should be properly tested by the contractor for functionality before submission to the EPA WAM or upload to the live

database. The database should be housed on the contractor's server and the database, modules, and reporting functions should be working and accessible at all times by the EPA WAM. Administration and maintenance of the database must be transferable to the EPA WAM, if necessary. The database should be secure and protected from corruption or data access by non-EPA WAM-approved users.

**TASK 5:** Deliverable should include a comprehensive and systematic literature search to locate publicly available information, resources (e.g., regulatory impacts analyses, cost/benefit data, databases, etc.), and "tools" (e.g., models) to document useful program impacts. Documentation should be based on available data, reasonable assumptions, and logical extrapolations using data obtained from well-accepted sources. Data entries of outcomes citations, incidents, and/or documentation should be reported in the ETV Database and should be complete and accurate (see **Appendix A** for format of data input, including documentation required and the types of data to be collected). The EPA WAM will perform periodic reviews throughout the period of performance to ensure that complete and appropriate data are being collected and entered into the database. Hard copy or electronic records to support outcomes documentation must be maintained and provided to the EPA WAM. The deliverable should include approximately 100 hours worth of data collection and entry into the database.

**TASK 6:**

**Case Study Report Outline:** The outline shall describe how the case studies will be organized (section titles, etc.) and list what types of information the case studies will contain. The outline shall include, at a minimum, a brief description of the different outcomes/impacts the contractor expects to be able to assess/report for each case study; notable approaches, resources, or analytical models that the contractor plans to use to develop the different case studies; and a recommendations for introductory materials and supplementary materials to be included in the full case study report. The outline shall be based on the template used in existing published ETV case study documents.

**Case Study Report:** The case study report shall include three (3) similarly formatted 10- to 15+- page-long case studies each including (potentially) the types of information listed under **Subtask 6.3** (above). The case study report shall be formatted based on the template used in existing published ETV case study documents, and include appropriate introductory and supplemental material (e.g., purpose statements, summaries, caveats and explanation of document organization and scope); documentation of all data sources, assumptions, and the use of any significant tools or resources; appropriate graphics and photographs; and all references. The final case study report shall address all review comments received, including from ETV vendors and external peer reviewers. The final camera-ready copy of the report shall include a cover, be formatted per EPA publication guidelines, and include an electronic file in compliance with Section 508 of the Rehabilitation Act.

**References:** The final case study report shall include a complete set of references to document the origin of specific information contained within the case studies, including citations for hard-copy or electronic versions of required reference or information sources as needed.

**Technology Briefs:** The deliverable should include three (3), 2-page ETV Technology Briefs, one for each of the case studies in the full report. Each Technology Brief shall be formatted consistent with the provided example and include, at a minimum, a brief synopsis of each of the following types of information: background, test description and results, technology category/area and significance, select ETV-verified performance data, select outcomes of verified technologies or use of verification data, references and related links, appropriate photos and graphics, and ETV contact information. The final copies of each Technology Brief shall include the original source file format (Microsoft publisher or appropriate alternative format), a \*.pdf file, and an electronic file in compliance with Section 508 of the Rehabilitation Act.

## **MANAGEMENT CONTROLS**

Periodic meetings between the EPA, contractor and work assignment managers are encouraged to discuss any questions that may arise during the performance or completion of this work assignment. At the EPA WAM's discretion, these meetings may occur via teleconference or video conferences. The contractor shall document these meetings and submit copies of this correspondence to the EPA WAM.

In all meetings, conferences, symposia, etc. participated in as a part of satisfying the terms of this contract, contractor personnel shall be clearly identified through the use of name badges that indicate their corporate affiliation. Contractor personnel shall clearly identify themselves as contractors when contacting center personnel or other organizations during the performance of this effort.

The contractor shall ensure that the work done under this project does not contain any real or apparent personal or organizational conflicts of interest.

The contractor shall maintain the confidentiality of any confidential business information collected as part of this effort.

The contractor shall comply with Government Printing Office guidelines during the performance of this effort.

The contractor shall comply with Paperwork Reduction Act guidelines during the performance of this effort.

The contractor shall inform the EPA WAM verbally or in writing within two businesses days if any significant problems arise, as well as any corrective actions and potential impacts on project deliverables, costs, etc.

## **SPECIAL REQUIREMENTS**

The contractor's monthly Progress Reports should contain a break-out detailing cumulative costs (ODCs, etc.) and LOE expended for each Task 1 through 6, including Subtasks, as outlined in this statement of work.